Customer No.: 31561
Docket No.: 10938-US-PA
Application No.: 10/709,005

To the claims:

1. (currently amended) A composition of a nano-tube composite polymer electrolyte, comprising:

a polymer substrate having main-chains and side-chains, which at least have an ether group, an acyl group, an amino group, a fluoro group or a Lewis base functional group;

a metal salt comprising a metal cation and an anion, wherein the metal salt and the polymer substrate form a polymer salt complex; and

a nano-tube modifier forming Lewis acid-base force with the polymer substrate and the polymer salt complex, wherein the nano-tube modifier is TiO_2, SiO_2 or Al_2O_3 and has a diameter from about 50nm to about 160 nm.

Claims 2-4. **Cancelled.**

5. (original) The composition of a nano-tube composite polymer electrolyte of claim 1, wherein a length/width ratio of the nano-tube modifier is more than 8.

6. (original) The composition of a nano-tube composite polymer electrolyte of claim 1, wherein the polymer substrate is about from 30% to about 90% by weight; the metal salt is about from 2% to about 30% by weight; and the nano-tube modifier is about from 3% to about 30% by weight.

7. (original) The composition of a nano-tube composite polymer electrolyte of claim 1, wherein the polymer substrate is about from 60% to about 90% by weight; the

metal salt is about from 2% to about 50% by weight; and the nano-tube modifier is about from 1% to about 20% by weight.

8. (currently amended) The composition of a nano-tube composite polymer electrolyte of claim 1, wherein the Lewis base functional group is selected from a group consisting of ~~oligo(oxyalkylene), flouralkyl group, fluoralkylene,~~ carbonate group, cyano group and sulfonyl group.

9. (currently amended) The composition of a nano-tube composite polymer electrolyte of claim 1, wherein the polymer substrate is selected from a group consisting of ~~polyalkylene oxide, polyvinyl fluoride, polyacrylonitrile,~~ polyester, polyether, polysulfone, ~~polyethylene oxide, polyvinylidene fluoride, poly(methyl methacrylate) (PMMA),~~ polysiloxane, polyphosphazene ~~e~~rand derivates thereof.

10. (original) The composition of a nano-tube composite polymer electrolyte of claim 3, wherein a weight-average molecular weight of the polymer substrate is from about 1000 to about 1,000,000.

11. (original) The composition of a nano-tube composite polymer electrolyte of claim 1, wherein the cation is selected from a group consisting of an alkaline-earth metal ion, an alkali metal ion and a transitional metal ion; and the anion is selected from a group consisting of ClO_4^-, $S_2O_8^{2-}$, BF_4^-, AsF_6^-, PF_6^- and TeF_6^-.

Claims 12-30. **Cancelled.**